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09/165,772	10/02/1998	JOHN EDWARD COOK	051481-5047-01	8315

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EXAMINER

POLITZER, JAY L

ART UNIT	PAPER NUMBER
2856	

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Please find below and/or attached an Office communication concerning this application or proceeding.



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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Paper No. 20

Application Number: 09/165,772  
Filing Date: October 02, 1998  
Appellant(s): COOK ET AL.

Scott J. Anchell  
For Appellant

EXAMINER'S ANSWER

MAILED  
APR 09 2002  
GROUP 2800

This is in response to the appeal brief filed 12/17/01.

Art Unit: 2856

**(1) Real Party in Interest**

A statement identifying the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) Status of Claims**

The statement of the status of the claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Invention**

The summary of invention contained in the brief is correct.

The appellant's statement of the issues in the brief is correct.

**(7) Grouping of Claims**

The rejection of claims 1-3 and 17 stand or fall together because appellant's brief includes a statement that this grouping of claims stand or fall together.

**(8) ClaimsAppealed**

Art Unit: 2856

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) Prior Art of Record**

3,413,840                    Basile et al                    12-1968

**(10) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

The rejection of claims 1-3 under 35 USC 112(2) is withdrawn. Claims 1-3 and 17 are rejected under 35 U.S.C. 103. This rejection is set forth in prior Office Action, Paper No. 15.

**(11) Response to Argument**

The instant application measures pressure and temperature in a tank at a first point in time, and temperature at a **second** point in time. Then the pressure at the **second** point in time is computed, from the ideal gas law **with the assumption of no weight loss**, using pressure and temperature at the first point in time and temperature, only, at the **second** point in time. The pressure at the **second** point in time is measured and compared to the computed pressure. If the computed pressure differs from the measured pressure at the **second** point in time, a leak is declared.

Art Unit: 2856

Basile measures pressure and temperature in a tank at a first point in time, and temperature at a **later** point in time, **continually**, using pressure and temperature gauges 5 and 6. Then the pressure at a **later** point in time is computed,  $P_c$ , from the ideal gas law **with the assumption of possible weight loss**, using pressure and temperature at a first point in time and temperature, only, at the **later** point in time. The pressure at the **later** point in time is measured,  $P_a$ , and compared to the computed pressure,  $P_c$ , see Col 3, Li 25-28. If the computed pressure,  $P_c$  differs from the measured pressure,  $P_a$ , at the **later** point in time, a leak is declared.

Applicant argues that "*Basile is directed to a leak detection system for double walled tanks of sea going vessels transporting cargoes of cryogenic liquefied gases*". That is, Applicant argues that Basile is non-analogous art. In response to applicant's argument that Basile is non-analogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Basile and the instant application each test tanks for leakage, and both are

Art Unit: 2856

classified in 73/49.2. Therefore, if applicant researched the prior art, it would be obligatory to search 73/49.2. In that event the Basile reference would be found. Further, Basile is more generally applicable to other tank-like structures; see Col 1, Li 25-30.

Applicant argues that "*Basile further states that leak conditions in the tank "change the weight of gas in the space which affects the signals developed by the pressure sensor but which does not affect significantly those generated by the temperature sensor.*" Applicant misreads Basile. Basile recognizes that the temperature is changing; Col 1, Li 61-63. That is, there is a temperature gradient that makes heat flow, and ambient conditions change all the time. Basile teaches that if at any time, one computes pressure from the ideal gas law, using a measured temperature (changed from the initial temperature), it should be the same as the actual pressure, where the pressure gauge is exposed to the same temperature (changed from the initial temperature). *In that sense only,* does Basile mean that the temperature doesn't matter because, it affects the calculated and actual pressure in the same way, even when the temperature is changing.

Applicant argues that "*Basile shows a leak detection system that is based on sensing an appreciable transfer of mass with*

Art Unit: 2856

respect to the space. This is in contrast to Appellants' invention in which changes in fuel vapor mass are taken to be negligible." Nowhere does Basile comment about the magnitude of the mass transfer. The instant application makes the assumption of negligible mass transfer; a species. Basile is generic in that it includes any amount of mass transfer and any amount of temperature or pressure variation; negligible or not. Therefore, the instant application is a special case of Basile's more general formulation. Further, and by definition, if there is a leak, product will always be lost.

Applicant argues that "In contrast to Appellants' invention, Basile speaks against detecting leaks with a system that includes measuring temperature variations." If this were the case, why does Basile continually measure temperature?

Applicant argues that "Basile compares calculated and measured pressure values at a common point in time to detect leakage, and consequently, there is no teaching or suggestion of comparing a temperature-compensated vapor pressure with respect to a vapor pressure measured at a different point in time." Applicant misreads Basile; the calculated pressure is based on the pressure and temperature at an earlier point in time. That is exactly what is done in the instant application.

Art Unit: 2856

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

128

JLP

March 28, 2002

Conferees

Mr. Arthur Grimley, AU 2852, Mr. Hezron Williams, AU 2856, Dr. Jay Politzer, AU 2856.

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